HVAC Project Progress

Behind the plywood-covered windows and drywall-enclosed corridors of the southwest quadrant of the Nebraska State Capitol, the Heating, Ventilation and Air Conditioning contractors are making progress to meet the November 1, 2019 first phase substantial completion date. As work progresses inside, contractors continue to work on the geothermal wellfield which will cool and heat the Capitol. While wells are being dug, pipes leading to the Capitol have been installed.

The work in this first phase of the Project lays the foundation for the remaining phases. In the basement, plumbing and electrical contractors are installing the mechanical equipment which will run the system. During this phase, the contractors are becoming familiar with the building and learning what to expect behind the walls and in cavities. The contractors are fine-tuning techniques to remove, repair and replace the windows which will play an important role in the energy efficiency of the Capitol following the project’s completion in 2025.

Above, wellfield excavation is complete and will allow the second half of the 225 wells to be drilled. Left, two water pipes have been installed underground leading from the Capitol north to K Street and east under K Street to the wellfield.

Above, large holes in the corridor walls left by the removal of the old system are being filled. The ceiling will be repaired once all components of the project are installed in the space above.

Left, new air handlers are being installed in third floor machine rooms. Some of the units recover heat from inside air to preheat outside air, improving efficiency.

Office work goes on. Above, new air ducts and fire sprinklers are being installed. Right, repaired windows and new fan coil units are installed. Paint and carpet will complete the work.

Right, a new eight ton transformer, switchgear and electrical conduit have been installed in the main equipment room under the tower. This new substation will serve the VFR (variable refrigerant flow) system which will heat and cool the building.
Experience and Service

Over 60 Years of Combined Service

One of the best ways to preserve a historic building is to keep it clean. Office of the Capitol Commission Conservation Supervisor Perry Shuman and Custodial Leaders Rick Naber and Richard Mallam have cleaned the Capitol for a combined 60 years. Working in preservation spaces, they have maintained the finishes which give the Capitol its landmark status. Their work provides visitors with a very positive impression of the Capitol and Nebraska. In addition, with over 900 occupants in the building, servicing restrooms, gathering recyclable material and answering clean-up calls keeps the custodians very busy. It takes a dedicated staff to do this often hidden and unsung work year in and year out.

Perry Shuman, a native Nebraskan, was working in manufacturing when he applied to work in the Capitol. The wages and benefits brought him here, but twenty three years later it’s his love of the building that keeps him.

Richard Mallam, originally from Superior, worked Miller and Paine Bakery before coming to the Capitol. He first worked for a contract custodial service and in 2000 became full time night Custodial Leader. He enjoys the night hours when he and the crew can take the time to properly care for the preservation spaces and floors.

Rick Naber grew up in Waco and was on the University’s cleaning crew before he came to the Capitol. As daytime Custodial Leader, Rick and a contract custodian have kept the Capitol clean for staff and visitors. Whether pushing a recycle barrel, a cleaning cart, or helping with special events, Rick worked hard to serve Nebraskans. After 18 years, he is preparing for retirement, when he can spend time with the grandchildren and travel.

Commission Celebrates 100 Years

Nebraska Capitol Commission members received a special momento at the February 2019 Commission meeting acknowledging the 100 year anniversary of its creation. Pictured left to right, Commissioner Doug Cary, Speaker Jim Scheer, Governor Pete Ricketts, Commissioner Thomas Sanderson and Capitol Administrator Bob Ripley. Unable to attend the meeting were Chief Justice Michael Heavican, UNL Architecture Dean Katherine Ankerson and History Nebraska CEO Trevor Jones.
Court of Appeals Judges’ Chairs

While the Nebraska Court of Appeals Chamber is out of service during the first phase of the HVAC Project, the Office of Capitol Commission Furniture and Finish staff have been working to restore the judges’ chairs. The Court of Appeals Chamber was furnished with seven walnut and leather chairs, although only three are currently used when the appellate court is in session. Once the southwest quadrant HVAC work is completed, the contractor will move to the southeast quadrant which includes the Supreme Court Chamber. At that time the seven Supreme Court judges will use all seven restored chairs as they share the chamber with the Court of Appeals.

Previous work on the chairs was not done with preservation in mind. There was major modification from the original structure, material and detail of the chairs. It was collaborative effort of all shop staff, the machinist, carpenter, furniture conservators and finisher that restored the chairs to their original grandeur.

An original tag found during deconstruction identifies the chair’s maker; The Marble & Shattuck Chair Co. operated in Cleveland, Ohio in the late 1800’s and early 1900’s. It is possible these chairs were moved from the second Capitol to the new building during construction.

Above, staff repairs to the chairs included filling in the previously removed bottom support in the back of the chair seat and filling holes left by tacks and staples. The back structure required the staff to reinforce the wooden insert which holds the webbing. They screwed poplar to the frame, a longer lasting solution than the previous nailed on pine.

Above, previously work on the chairs used a mix of new, left, and old, right, materials. Using traces left behind and their experience with historic techniques, staff restored the chairs to a much better condition.

Above, left, non-original foam from the earlier work was replaced with original materials, providing a more durable seat.

Above, the chair’s seat supports had been altered, but not in a consistent manner. Some of the modifications impacted the function of the chair legs and material removal had weakened the frame supports.

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Above, left, a past re-upholstry attempt used improper materials and changed the configuration of the Court of Appeals judges’ chairs. Right, after restoration using original techniques and materials.

Above, left, the previous re-upholstery project did not follow conservation standards. OCC staff gave the chairs back their dignity, right.

Above, a detail of the leg base, above, shows the fine craftsmanship and joinery of the manufacturer of the chairs.

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Courtyard Fountains Colorful and Complete

With the installation of colored Italian glass tile in the bowls of the courtyard fountains this spring, the project to realize the final element of architect Bertram Goodhue’s Nebraska State Capitol is nearly complete. All that remains is restoration of each courtyard’s original landscape plan. The landscaping will begin in Spring of 2020 thanks to fundraising efforts by the Former Legislators of the Nebraska Unicameral. Plantings will continue for the next 5 years as the HVAC Project progresses around the four quadrants of the base of the building.

After the fountains were dedicated during Nebraska’s 2017 Sesquicentennial celebration, an anonymous donor came forward to fund the installation of colored and gold tile to adorn the fountain bowls. The colored tiles relate to the thematic scheme of Hartley Burr Alexander. He included representations of the First People of Nebraska including artistic references to water as the foundation of life and agriculture.

Venetian glass tiles were used to create the mosaic wall murals in the Capitol’s Great Hall. The colorful glass and gold tiles in the Great Hall reflect and sparkle in the defused sunlight of the Great Hall’s onyx windows. Capitol Administrator Bob Ripley wanted to create the same sparkling effect and carry the Native American theme into the courtyards.

In consultation with the Nebraska Commission on Indian Affairs, four colors of tile were chosen: white, blue, yellow and red. These colors hold significance for many of the First People, often signifying the four seasons or four directions. These four colors were chosen to line the bowls on the fountains. The addition of gold tile adds sparkle and mirrors the gold-tiled dome 400 feet above.

The courtyards are open and the fountains running as the HVAC project and the installation of the courtyard landscape plantings will allow. Viewed from inside the courtyard, from the second floor loggias, or from the 14th floor, the fountains bring light and life to the Capitol.

The colorful tiles in the fountains change appearance depending on the movement of water and the angle of the sun. Above, the red and gold tiles as installed. Right, once water was introduced the appearance of the tile changed dramatically.
The project to place colored tile in the courtyard fountains presented several challenges to Capitol Administrator Bob Ripley. The first discussions about the possibility of lining the fountain bowls with glass tile revolved around finding a durable and long lasting way to adhere the tile to the bronze. Without hesitation, the decision was made to use Italian glass mosaic tile similar to that used in the Great Hall mosaics. Samples of the glass tile were procured from Bisazza, an Italian company, and consultants WJE began a series of adhesive tests which ultimately failed. A tile consultant was found to coordinate the purchase and design of the glass mosaic patterns. The tile consultant suggested a suitable adhesive. In a manner similar to the installation of Hildreth Meiere’s interior floor mosaics, the glass tile design was glued to a clear plastic film backing and shipped here, ready to be laid.

When time came to select a tile setter, Ripley chose a man who has been involved with the courtyards for a long time with skills to handle the task. Erv Wemhoff was a young man starting out at Cornhusker Tile the first time he worked in the Capitol’s courtyards. In the early 1980’s the sandstone and marble walkways in the courtyards were failing. The pavers were originally laid in sand and had shifted out of place. Capitol Preservation Architect Tom Kaspar oversaw the project to re-lay the tile in concrete and became acquainted with Wemhoff. Following the installation of the fountains, when the same paving tile in the courtyard walks was ready to be relaid, Wemhoff was again called to the Capitol. And finally, he was on the job once more to lay the glass tile in the courtyard fountains. Like many who have contributed to the care of the building, his work in the courtyards enhances the Capitol and will be enjoyed by future generations of Nebraskans.

Left, Erv Wemhoff with Cornhusker Tile set the marble pavers in the walks during the 2017 fountain installation. Wemhoff returned to install the glass tile in the fountain bowls.

Left, tile designer, Doug Harris at the Bisazza studio in Florida created the pattern in small panels, allowing gaps in the outer edge to accommodate the bowl’s curve. The bowls were stripped to bare bronze to provide maximum adherence. Simulated weather testing revealed the commonly available grouts used for tile were too rigid: expansion and contraction caused the glass tile to crack. Above, a flexible adhesive, similar to that used to hold tiles on the space shuttles is applied to the bowl. Above right, each panel of tile had a brightly colored placement number attached so they could be laid according to the pattern.

Erv Wemhoff

Left, the gold and white tiles come alive as sunlight reflects off the tile and moves through the moving water of the fountain.

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The Capitol was an icon for Nebraskans even before it was completed. Businesses in Lincoln have used the Capitol as a part of their logo for almost 100 years. One such example was discovered during the current Heating, Ventilation and Air Conditioning Replacement Project; a bread wrapper with the front elevation of the Capitol in the design was found tucked into an attic space. The company producing the bread took advantage of the popularity of the new Capitol for its promotional value. Interestingly, the image of the Capitol suggests it was used for promotion even before the building construction was finished. While the base of the building is relatively accurate, the tower detail suggests the image was created using the competition drawings, rather than the actual constructed tower.

If you have Nebraska State Capitol related items you would like to donate to the Nebraska Capitol Collections please contact the Archivist at (402)471-0444.
Pediatric Cancer Awareness
August 31, 2019
The Capitol will be lit gold in the evening to promote Pediatric Brain Cancer Awareness.

Labor Day Holiday
September 2, 2019
The Capitol will be open for tours from 10:00 a.m. to 5:00 p.m.

Lights of Hope Celebration
September 2, 2019
The Nebraska Division of Behavioral Health will remember those lost to overdose, and celebrate hope and life in an evening awareness event beginning at 5:00 p.m. on the north plaza of the Capitol.

Draw Your Dreams Display
September 23-27, 2019
The State Treasurer’s Office will showcase Nebraska student art in the first floor rotunda as part of the NEST College Savings Plan’s Art contest.

Bar Induction Ceremony
September 24, 2019
The Nebraskan Supreme Court will swear in newly admitted members of the Nebraska Bar Association at 10:00 a.m. in the 2nd floor rotunda.

Walk for Freedom
October 6, 2019
I’ve Got A Name is sponsoring an awareness walk beginning the University of Nebraska Student Union at 1:00 p.m. and ending at the Capitol north steps with speakers.

Hispanic Heritage Month Exhibit
October 9-15, 2019
The Nebraska Latino-American Commission will have a first floor rotunda display of photographs and educational materials.

Hispanic Heritage Commemoration
October 11, 2019
The Nebraska Latino-American Commission will hold a celebration of Hispanic Heritage at 3:30 p.m. in the 2nd floor rotunda of the Capitol.

Probation Officer Ceremony
October 16, 2019
The Nebraska State Probation Administration will swear in a class of new probation officers at 1:30 p.m. in the 2nd floor rotunda of the Capitol.

Veterans Day Parade
November 9, 2019
The Lincoln Veterans Parade will have an opening ceremony on the north side of the Capitol at 2:00 p.m.

Veteran’s Day Holiday
November 11, 2019
The Capitol will be open for tours from 10:00 a.m. to 5:00 p.m. and will be lit green in the evening to honor veterans.

Gettysburg Address Commemoration
November 16, 2019
The Sons of Union Veterans of the Civil War will hold a reading of the Gettysburg Address in the 2nd floor rotunda at 10:30 a.m.

Commissioner’s Recognition
November 25, 2019
The Nebraska Department of Education—Center for Student Leadership and Expanded Learning will hold a recognition of outstanding Nebraska students in the 2nd floor rotunda at 2:30 p.m.

Thanksgiving Holiday
November 28-29, 2019
The Capitol will be closed.

Educational Display
December 18-14, 2019
The National Society of Atheists will have an In no gods we Trust display in the first floor rotunda.

NSP Camp 60 Graduation
December 20, 2019
The Nebraska State Patrol will hold a graduation ceremony in the second floor rotunda at 10:00 a.m.

Christmas Day
December 25, 2019
The Capitol will be closed.

New Years Day
January 1, 2020
The Capitol will be closed.

Hemp Education Week
January 11-19, 2020
The Nebraska Hemp Company will have a display on the uses of hemp in the first floor rotunda.

Nebraska Walk for Life
January 18, 2020
Nebraska Right to Life will begin their Walk for Life on the north side of the Capitol at 10:00 a.m.

Martin Luther King Day Holiday
January 20, 2020
The Capitol will be open for tours from 10:00 a.m. to 5:00 p.m.

State College Awareness Display
January 27-February 3, 2020
The Nebraska State College Board will have a display in the first floor rotunda.

National Wear Red Day
February 7, 2020
The Capitol will be lit red for the American Heart Association kick off of American Heart Month.

Social Work Week Display
February 17-21, 2020
The National Association of Social Workers-Nebraska will have a display in the first floor rotunda of the Capitol.

All events at the Nebraska State Capitol are free and open to the public.

Guided Tours are offered Monday–Friday hourly from 9:00 am to 5:00 pm, except at noon. Saturday and Holidays from 10:00 am to 5:00 pm, except at noon and Sunday from 1:00 to 4:00 pm. Please call 402.471.0448 or visit www.capitol.org for more information.
2019 Court of Appeals Ornament

The Office of the Capitol Commission’s 2019 Commemorative Ornament features the Court of Appeals. In 2015, the Office of the Capitol Commission began a 10-year project to replace/upgrade the Capitol’s entire 1960’s heating, ventilation and air-conditioning system. As the outdated HVAC system is replaced in the Nebraska Court of Appeals Chamber, original finishes modified by the 1960’s installation of air conditioning will be restored. The new geothermal heating and cooling system will utilize fan coil units placed inside the chamber’s original window cabinets making the noisy industrial air conditioning ventilation system obsolete. The hand stenciled linen wall covering will be restored and the original cast iron wall ventilation grills returned to service.

To commemorate the first phase of the HVAC project and the restoration of the Court of Appeals’ Chamber the Office of the Capitol Commission’s 2019 Commemorative Ornament is patterned from the original grilles.